Application No: 10/829,535 Response to Office Action of February 2, 2007

## IN THE DRAWINGS

The attached sheets of formal drawings replace the original informal sheets of drawings.

No new matter has been added.

Attachment: Replacement Sheets (7)

Claims 13-15, 17, and 29-30 remain in the application. New Claims 36-45 have been

added. Of these, Claims 13, 29, 36, 40 and 43 are in independent form.

Claims 1-12, 16, 18-28, and 31-35 are cancelled.

Claims 13-15, 17, 29 and 30 were objected to as being dependent upon a rejected base

claim. Pursuant to the Examiner's indication of allowable subject matter, Claims 13 and 29 have

been rewritten in independent form to include all of the limitations of the respective base claims

and any intervening claims. Accordingly, it is respectfully submitted that Claims 13-15, 17, 29

and 30, as amended, are here now presented in condition for allowance, which allowance is

respectfully solicited.

New Claims 36-45 have been added to more fully protect Applicant's contribution to the

art. No new matter has been added.

Claim Rejections Under 35 U.S.C. §103

Claims 1-34 stand rejected under 35 U.S.C. §103 as being unpatentable over Yonemoto

(U.S. Patent 4,635,958) to Kataoka (U.S. Patent 4,243,247).

New Claims 36-45 have been redrafted using terminology lifted directly from the

specification and/or inherently shown in the drawing figures. New independent Claims 36, 40

and 43 have been carefully drafted to articulate an unpredictable, unexpected result achieved by

the Applicant's invention.

According to the prior art as exemplified by Yonemoto, torsion bar adjustment is

accomplished exclusively by a screw-driven mechanism that displaces the distal tip of an

adjustment lever connected to the torsion bar. As universally understood in this field, such

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adjustment levers have a severally limited range of motion, typically on the order of 10°-15°. One advantage of the Yonemoto style screw adjustment mechanisms resides in the ability to precisely and infinitely adjust suspension height. In other words, the screw mechanism enables an infinite range of suspension height calibration within the limited (e.g., 10°-15°) range of motion afforded the adjustment lever which is trapped in the frame. Thus, a Yonemoto style system advantageously permits a technician to finely tune ride height. However, once the torsion bar becomes fatigued to the point where the screw adjust is bottomed out, i.e., maxed to the limit of its adjustment range, the torsion bar must be discarded and a new one installed. This is an

expensive undertaking and a waste of a torsion bar with substantial remaining life.

An alternative torsion suspension system is suggested by Kataoka. In this system, there is no screw adjust feature. In fact, Kataoka expressly teaches away from screw adjust mechanisms in Column 1, Lines 40-47. The Kataoka solution is to fit the end of the torsion bar with an incrementally adjustable hub feature fitted directly into the frame. A major draw back of the Kataoka system is that it is not infinitely adjustable. Rather, suspension adjustments are possible only within the defined increments of the gear teeth used. Finer gear teeth could theoretically result in finer incremental adjustments (e.g., Figure 9), but for practical purposes would be highly disfavored in the industry due to fine-tooth weakness in sheer modes. I.e., finely spaced gear teeth would improve the ability to more accurately calibrate a suspension ride height, but would strip off under tremendous shear loads in actual use.

Another significant downside to Kataoka is that it does not represent a retro-fit solution.

The Kataoka system must be designed into new vehicles as an Original Equipment (OE) feature.

As articulated in new Claims 36-45, the Applicant has created a truly unique, advantageous solution to the dilemma experienced by the Yonemoto style lever adjust systems.

Applicant has achieved a new, unexpected and unpredictable result --- namely a life extension for a typical torsion bar. Neither Yonemoto nor Kataoka enable a useful life extension for an otherwise fatigued torsion bar. And neither Yonemoto nor Kataoka represent a retrofit solution to a problem experienced by millions of existing vehicles.

Reconsideration of this application, as amended, is respectfully requested.

It is believed that this application is now in condition for allowance. Further and favorable action is requested.

The Patent Office is authorized to charge or refund any fee deficiency or excess to Deposit Account No. 04-1061.

Respectfully submitted,

DICKINSON, WRIG

Ion E. Shackelfor

Bloomfield Hills, MI

734-623-1734

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